

REMARKS

This communication responds to the Office Action dated October 18, 2010. Claims 1 and 11 are amended, no claims are canceled, and no claims are added herein. As a result, claims 1-15 are now pending in this Application.

The Rejection of Claims Under 35 U.S.C. § 101

Claims 1 and 3-11 stand rejected under 35 U.S.C. § 101 because it is alleged the claimed invention is directed to non-statutory subject matter. This rejection is respectfully traversed because a proper *prima facie* case of non-statutory claiming has not been established. Nevertheless, to expedite prosecution and not for reasons related to patentability, the following amendments have been made:

Claim 1 now recites “...selectively reading from the bit-stream, using a decoder, ...”.

Claim 11 now recites “A non-transitory computer readable medium ...”.

In the case of claim 1, predetermined parameters are read from the bit-stream by a decoder. Under *Bilski*, “[a] claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” The use of a decoder to accomplish the recited acts clearly ties the claim to a particular machine, and thus, claim 1 is directed to statutory subject matter. This amendment is supported by the language of claim 15 and FIG. 2, element 210 in the Application as originally-filed and thus, no new matter has been added.

In the case of claim 11, a non-transitory computer readable medium is now recited, as suggested by the Examiner. Therefore, claim 11 is clearly directed to statutory subject matter.

Reconsideration and withdrawal of the rejections under 35 U.S.C. § 101 is respectfully requested.

The Rejection of Claims Under 35 U.S.C. § 103

Claims 1, 3-5, 8, 11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US Patent 6,674,874 B1 and Yoshida hereinafter) and in view of Hampapur et al. (US 2001/0003468 A1 and Hampapur hereinafter) and further in view of Davis (US Patent 5,907,619). Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Hampapur and Davis as applied to claim 1 above, and further in view of Makiyama et al. (US Patent 6,687,409 B1 and Makiyama hereinafter). Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Hampapur and Davis as applied to claim 1 above, and further in view of Krapp et al. (US 2002/0169934 A1 and Krapp hereinafter). Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Hampapur and Davis as applied to claim 1 above, and further in view of Levine (US Patent 6,266,644 B1). Because a proper *prima facie* case of obviousness has not been established in each case, these rejections are respectfully traversed.

First, it is respectfully noted that the combination proposed by the Office changes the basic mode of operation taught by Yoshida, and is therefore improper. That is, the Office asserts that “the teachings of Davis would have improved the teachings of Yoshida in view of Hampapur by concatenating hashes in order to allow the receive to authenticate a received portion of data without receiving the entire data.” However, this assertion ignores the fundamental operations of Yoshida, and either defeats a safety feature that is part of those operations, or unnecessarily burdens the operations with additional calculations.

Yoshida teaches embedding the hash value of each frame of image data into a corresponding block of audio data, and vice-versa. *See* Yoshida, Col. 12, line 62 – Col. 13, line 4. Thus, as the blocks are received and decoded, audio and/or image playback are disabled when the hash values for the image data and audio data don’t match. *See* Yoshida, Col. 14, line 7 – 35. This is an ongoing process, which occurs on a block-by-block basis. *See* Yoshida, Col. 13, line 49 – Col. 14, line 35.

The Office proposes to modify Yoshida by concatenating hash values, as recited in the claims. However, if the concatenated hash values are meant to replace the embedded hash values noted by Yoshida, then the safety feature of constant validation (on a block-by-block basis) is defeated. On the other hand, if the concatenated hash values are meant to be used in

addition to the embedded values described by Yoshida, then the additional operations of concatenation and comparison are superfluous – they are not needed. This is because Yoshida already provides validation on a block-by-block basis. One of ordinary skill in the art would not be motivated to implement the dysfunctional operation in the first case, or the unnecessary operation in the second case.

“If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” (*In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). The CCPA has also noted that “[t]he court must be ever alert not to read obviousness into an invention on the basis of the applicant’s own statements; that is, we must view the prior art without reading into that art appellant’s teachings.” *In re Sponnoble*, 160 USPQ 237, 243 (CCPA 1969).” Here, substituting the use of concatenated hash values as taught by Davis for, or using them in addition to the block-by-block validation described by Yoshida changes the operational principle of Yoshida, and thus, the proposed combination is not sufficient to render the claims *prima facie* obvious.

Second, Davis does not teach “deriving a hash function by a concatenation of the hash words (col. 6, lines 33-35) ...” as asserted by the Office. This is because the assertion by the Office assumes that the hash words concatenated by Davis are the same as those recited in prior clauses of the claim. However, as discussed during the Examiner’s Interview of June 24, 2010, this is not the case because Davis teaches concatenating hash values for video frames, and not “each time frame” as recited in the claims.

It is respectfully noted that the independent claims recite calculating “a separate hash word from said parameters for each time frame ...”. The image frames described by Davis have no “length” in time. Rather, the frame rate or frequency is the speed at which an imaging device produces unique consecutive images called frames. Thus, while a new image frame may be presented to the viewer every 1/30 of a second, for example, each frame individually captures an instant in time – such that time is essentially frozen at the instant of capture. The frames in Davis do not capture and relate information concerning activity which occurs between one frame and the next, as do the time frames recited in the claims.

As noted in the Examiner's Interview, the language of the claims makes clear that individual hash words are calculated over separate time frames that, taken together, make up a period of time that is covered by the set of concatenated hash words. Davis, either alone or in conjunction with the other cited references, does not provide this teaching.

In summary, the combination of Yoshida and Davis as proposed by the Office is improper. Moreover, Davis does not teach or suggest what is recited in the independent claims. Thus, all of the independent claims should be in condition for allowance. The dependent claims should also be in condition for allowance, since any claim depending from a nonobvious independent claim is also nonobvious. *See M.P.E.P. §2143.03.* Reconsideration and withdrawal of the rejections under 35 USC § 103(a) are therefore respectfully requested.

CONCLUSION

It is respectfully urged that all of the pending claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned representative at (210) 308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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